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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,036	01/18/2006	Gregory Becker	DC5146 PCT1	7066

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EXAMINER	
HUNG, MING HUNG	
ART UNIT	**PAPER NUMBER**
2829	

NOTIFICATION DATE	DELIVERY MODE
08/20/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents.admin@dowcorning.com

Office Action Summary	Application No.	Applicant(s)	
	10/565,036	BECKER ET AL.	
	Examiner	Art Unit	
	Ming Hung Hung	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Amendment filed on 06/19/08 has been received and entered into record. Claims 1-24 are pending.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,617,674 B2 in view of U.S. Publication 2002/0000239 A1.

5. As to claims 1-3 and 11, claim 1 of U.S. Patent No. 6,617,674 B2 discloses substantial features of claims 1-3 and 11 except “removing all or a portion of the product of step (v) using an etching solution” and “removing all or a portion of the patterned film using an etching solution”. U.S. Publication 2002/0000239 A1 teaches removing elastomeric silicone adhesive deposits using an etching solution. Therefore, it would have been obvious to combine U.S. Patent No. 6,617,674 B2 and U.S. Publication 2002/0000239 A1 in order to remove organopolysiloxane based silicone for the purpose of rework (see rejections below for details).

6. As to claims 4, 6-10, 12, 14-18, 21, and 24, the disclosure of U.S. Publication 2002/0000239 A1 further teaches the claimed composition of the etching solution. Therefore, it would have been obvious to employ the claimed composition as the etching solution in order to remove organopolysiloxane based silicone (see rejections below for details).

7. As to claims 5, 13, 19, 20, 22, and 23, the rejections applied to claims 5, 9, and 20 below also apply.

Claim Rejections - 35 USC § 103

8. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (US Publication 2002/0158317 A1 as indicated in [0007] of the original disclosure and AAPA hereinafter) in view of Sachdev et al. (US Publication 2002/0000239 A1 and Sachdev hereinafter).

9. As to claims 1, 3, 4, 6-10, AAPA discloses:

[Claim 1] the method comprises (i) applying a photopatternable silicone composition to a surface of a substrate to form a film (page 1, [0010]-[0012])**, where the photopatternable silicone composition comprises: (A) an organopolysiloxane containing an average of at least two silicon-bonded alkenyl groups per molecule** (page 1, [0013])**, (B) an organosilicon compound containing an average of at least two silicon-bonded hydrogen atoms per molecule in a**

concentration sufficient to cure the composition (page 1, [0014]), **and (C) a catalytic amount of a photoactivated hydrosilylation catalyst** (page 1, [0015]); **(ii) exposing a portion of the film to radiation to produce a partially exposed film having non-exposed regions covering at least a portion of the surface and exposed regions covering the remainder of the surface** (page 1, [0016]); **(iii) heating the partially exposed film for an amount of time such that the exposed regions are substantially insoluble in a developing solvent and the non-exposed regions are soluble in the developing solvent** (page 1, [0017]); **(iv) removing the non-exposed regions of the heated films with the developing solvent to form a patterned film** (page 1, [0018]); **(v) heating the patterned film** (page 1, [0019]);

[Claim 3] where the substrate is an active surface of a semiconductor wafer (page 1, [0010]**).**

However, AAPA fails to disclose:

[Claim 1] (vi) removing all or a portion of the product of step (v) using an etching solution;

[Claim 4] where the removing step is carried out using an etching solution comprising an organic solvent and a base;

[Claim 6] where the organic solvent is selected from a monohydric alcohol, adihydric alcohol, a monoether, a diether, a polar aprotic solvent, and combinations thereof;

[claim 7] where the base is selected from ammonium hydroxide, cesium hydroxide, potassium hydroxide, sodium hydroxide, and combinations thereof;

[Claim 8] where the base is selected from phosphazene, tetraalkyl ammonium hydroxides, and combinations thereof;

[Claim 9] where the solvent is a monohydric alcohol selected from the group consisting of methanol, ethanol, n-propanol, isopropanol, n-butanol, isobutanol, text-butanol, and combinations thereof;

[Claim 10] use of the method of claim 1 for rework, photoresist, or cleaning applications.

Nonetheless, these features are well known in the art and would have been an obvious modification of the method disclosed by AAPA, as evidenced by Sachdev.

Sachdev discloses:

removing elastomeric silicone adhesive deposits using an etching solution (page 2, [0024]-[0026]);

[Claim 4] where the removing step is carried out using an etching solution comprising an organic solvent and a base (page 2, [0026]);

[Claim 6] where the organic solvent is selected from a monohydric alcohol, adihydric alcohol, a monoether, a diether, a polar aprotic solvent, and combinations thereof (page 2, [0026]);

[Claim 7] where the base is selected from ammonium hydroxide, cesium hydroxide, potassium hydroxide, sodium hydroxide, and combinations thereof (page 2, [0026]);

[Claim 8] where the base is selected from phosphazene, tetraalkyl ammonium hydroxides, and combinations thereof (page 2, [0026]);

[Claim 9] where the solvent is a monohydric alcohol selected from the group consisting of methanol, ethanol, n-propanol, isopropanol, n-butanol, isobutanol, text-butanol, and combinations thereof (pages 1-2, [0010]-[0014] discloses some of the monohydric alcohol group could be used as the solvent to remove silicones)**;**

[Claim 10] use of the method of claim 1 for rework, photoresist, or cleaning applications (page 1, [0002])**.**

Given the teaching of Sachdev, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying AAPA by employing the well known or conventional features of etching solution and its specified solvent and base, such as disclosed by Sachdev, in order to remove organopolysiloxane based silicone for the purpose of rework.

10. As to claims 5, 19, and 20, although AAPA in view of Sachdev discloses substantial features of the claimed invention (see paragraphs above), it fails to disclose:

[Claim 5] where the etching solution contains no more than 25% water based on the weight of the etching solution;

[Claim 19] where the etching solution comprises an organic solvent and a base, and the etching solution contains no more than 6% water based on the weight of the etching solution;

[Claim 20] where the etching solution contains no more than 3% water based on the weight of the etching solution.

However, it would have been obvious to the person having ordinary skill in the art at the time of the invention since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re. Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

11. As to claim 21, although AAPA discloses substantial features of the claimed invention (see paragraphs above), it fails to disclose:

where the etching solution is anhydrous.

Nonetheless, this feature is well known in the art and would have been obvious modification of the method disclosed by AAPA, as evidenced by Sachdev.

Sachdev discloses:

where the etching solution is anhydrous (page 3, [0033])**.**

Given the teaching of Sachdev, person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying AAPA by employing the well known or conventional features of anhydrous etching solution, such as disclosed by Sachdev, in order to remove organopolysiloxane based silicone for the purpose of rework.

12. As to claims 2, 11-18, and 22-24, the rejections based on AAPA in view of Sachdev applied to claims 1, 3-10, and 19-21 also apply.

Response to Arguments

13. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ming Hung Hung whose telephone number is (571) 270-3832. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ming Hung Hung/

Examiner, Art Unit 2829
08/12/08

/Ha T. Nguyen/
Supervisory Patent Examiner, Art Unit 2829